

FIGURE 1A

FIGURE 1B

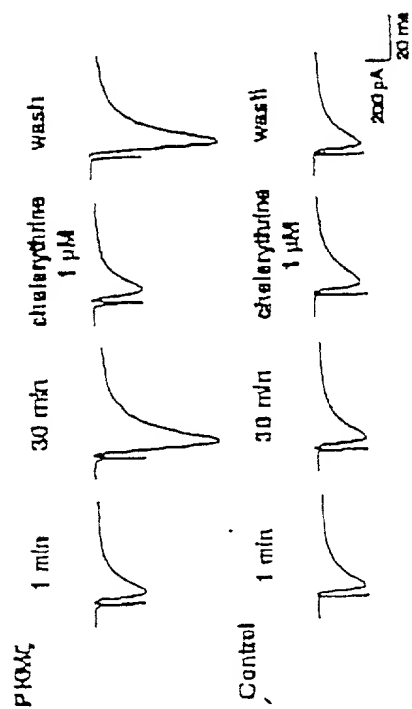


FIGURE 2A

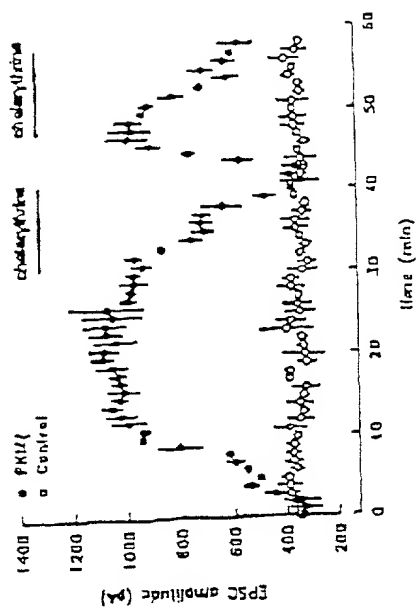


FIGURE 2B

100340 6405250

A

Silver Stain

kDa

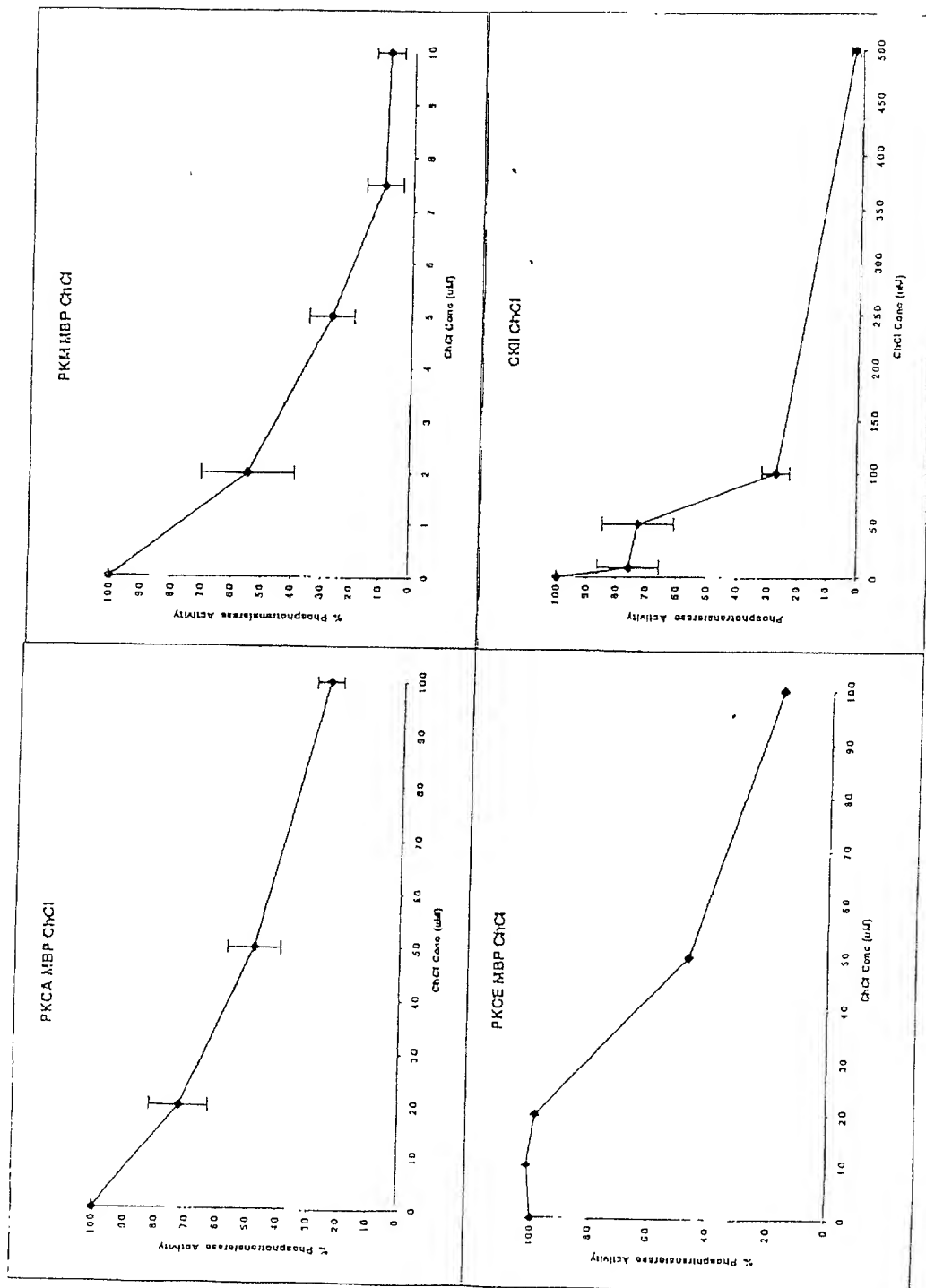
97-

66-

→ PKMC

FIGURE 3

FIGURE 4



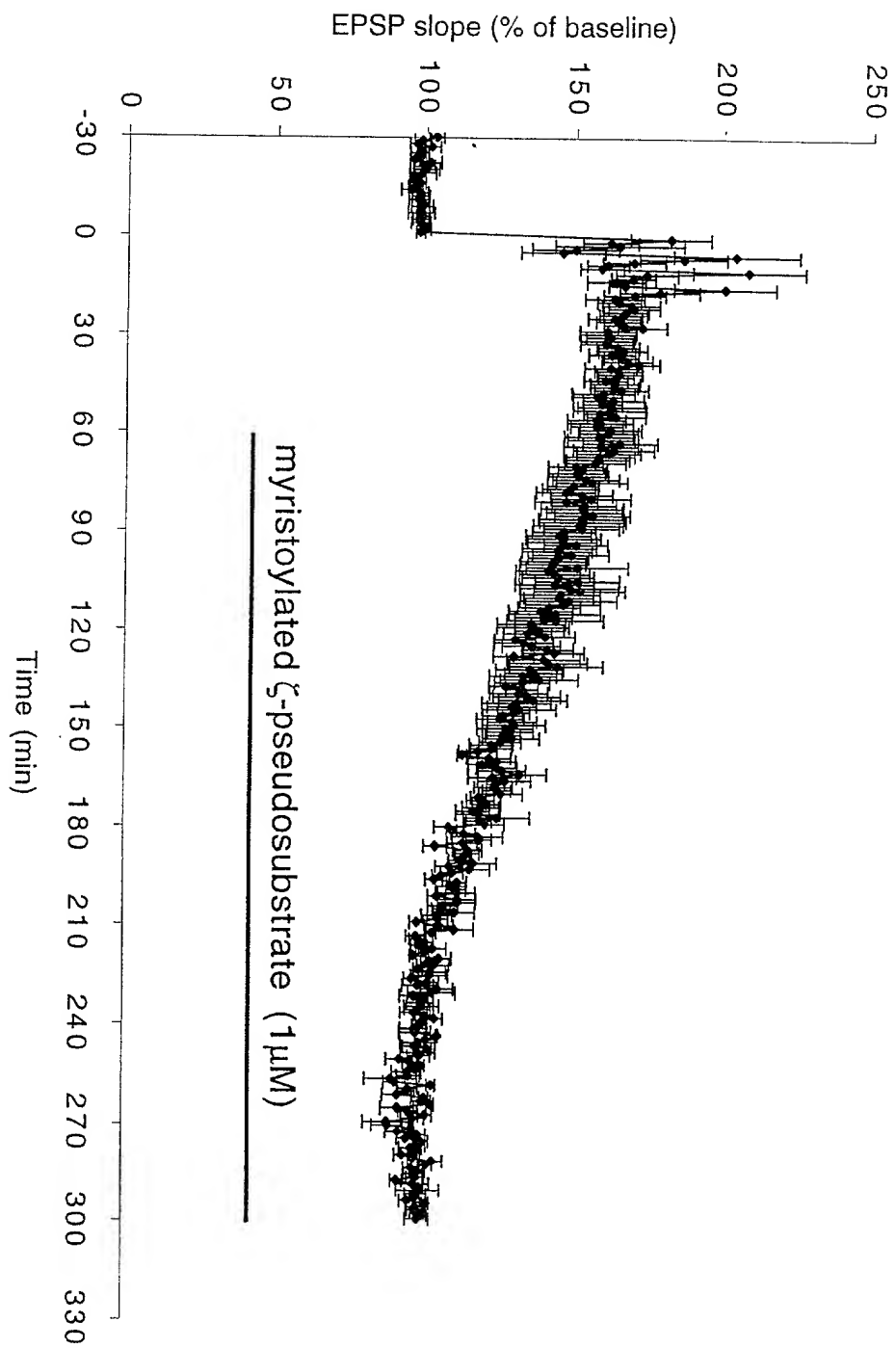


FIGURE 5

[illegible]

M D>

510 520 530 540 550
GACCTTCCTTCCGAGGAGACARATGGAATTGCTTACATTTTCCTCATCCCG
CTGGAAGGAAGGCTCCTCTGTYTACCTTAACGAATGTAAAGGAGTAGGGC
D L P S E E T X G I A Y I S S S R

FIGURE 6

560 570 580 590 600
GAAGCATGACAGCATTAAAGACGACTCGGAGGACCTTAAGCCAGTTATCG
CTTCGTA CTGTAATTTCTGCTGAGCCTCCTGGAATTCGGTCAATAGC
K H D S I K D D S E D L K P V I>

610 620 630 640 650
ATGGGATGGATGGAATCAAAATCTCTCAGGGGCTTGGGCTGCAGGACTTT
TACCCTACCTACCTTAGTTTTAGAGAGTCCCCGAACCCGACGTCTGAAA
D G M D G I K I S Q G L G L Q D F>

660 670 680 690 700
GACCTAATCAGAGTCATCGGGCGCGGGAGCTACGCCAAGGTTCTCCTGGT
CTGGATTAGTCTCAGTAGCCCGCGCCCTCGATGCGGTTCCAAGAGGACCA
D L I R V I G R G S Y A K V L L V>
---ATP-Binding Site-----

710 720 730 740 750
GCGGTTGAAGAAGAATGACCAAATTTACGCCATGAAAGTGGTGAAGAAAG
CGCCAACTTCTTCTTACTGGTTTTAAATGCGGTACTTTCACCACTTCTTTC
R L K K N D Q I Y A M K V V K K>
-----ATP-Binding Site----->

760 770 780 790 800
AGCTGGTGCATGATGACGAGGATATTGACTGGGTACAGACAGAGAAGCAC
TCGACCACGTACTACTGCTCCTATAACTGACCCATGTCTGTCTCTTCGTG
E L V H D D E D I D W V Q T E K H>

810 820 830 840 850
GTGTTTGAGCAGGCATCCAGCAACCCCTTCCTGGTCTGGATTACACTCCTG
CACAAACTCGTCCGTAGGTGCTTGGGGAAGGACCAGCCTAATGTGAGGAC
V F E Q A S S N P F L V G L H S C>

860 870 880 890 900
CTTCCAGACGACAAGTCGGTTGTTTCCTGGTTCATTGAGTACGTCAACGGCG
GAAGGTCTGCTGTTTCAGCCAACAAGGACCAGTAACTCATGCAGTTGCCGC
F Q T T S R L F L V I E Y V N G>

910 920 930 940 950
GGGACCTGATGTTCCACATGCAGAGGCAGAGGAAGCTCCCTGAGGAGCAC
CCCTGGACTACAAGGTGTACGTCTCCGTCTCCTTCGAGGGACTCCTCGTG
G D L M F H M Q R Q R K L P E E H>

960 970 980 990 1000
GCCAGGTTCTACGCGGCCGAGATCTGCATCGCCCTCAACTTCCTGCACGA
CGGTCCAAGATGCGCCGGCTCTAGACGTAGCGGGAGTTGAAGGACGTGCT
A R F Y A A E I C I A L N F L H E>

FIGURE 6 (CONT'D)

1010 1020 1030 1040 1050
GAGGGGGATCATCTACAGGGACCTGAAGCTGGACAACGTCCTCCTGGATG
CTCCCCCTAGTAGATGTCCCTGGACTTCGACCTGTTGCAGGAGGACCTAC
R G I I Y R D L K L D N V L L D>

1060 1070 1080 1090 1100
CGGACGGGCACATCAAGCTCACAGACTACGGCATGTGCAAGGAAGGCCTG
GCCTGCCCCGTGTAGTTCGAGTGTCTGATGCCGTACACGTTTCCTTCCGGAC
A D G H I K L T D Y G M C K E G L>

1110 1120 1130 1140 1150
GGCCCTGGTGACACAACGAGCACTTTCTGCGGAACCCCGAATTACATCGC
CCGGGACCACTGTGTTGCTCGTGAAAGACGCCTTGGGGCTTAATGTAGCG
G P G D T T S T F C G T P N Y I A>

1160 1170 1180 1190 1200
CCCCGAAATCCTGCGGGGAGAGGAGTACGGGTTTCAGCGTGGACTGGTGGG
GGGGCTTTTAGGACGCCCCCTCTCCTCATGCCCAAGTCGCACCTGACCACCC
P E I L R G E E Y G F S V D W W>

1210 1220 1230 1240 1250
CGCTGGGAGTCCTCATGTTTGAGATGATGGCCGGGCGCTCCCCGTTTCGAC
GCGACCCCTCAGGAGTACAACTCTACTACCGCCCCGCGAGGGGCAAGCTG
A L G V L M F E M M A G R S P F D>

1260 1270 1280 1290 1300
ATCATCACCGACAACCCGGACATGAACACAGAGGACTACCTTTTCCAAGT
TAGTAGTGGCTGTTGGGCCTGTACTTGTGTCTCCTGATGGAAAAGGTTCA
I I T D N P D M N T E D Y L F Q V>

1310 1320 1330 1340 1350
GATCCTGGAGAAGCCCATCCGGATCCCCCGGTTTCCTGTCCGTCAAAGCCT
CTAGGACCTCTTCGGGTAGGCCTAGGGGGCCAAGGACAGGCAGTTTCGGA
I L E K P I R I P R F L S V K A>

1360 1370 1380 1390 1400
CCCATGTTTTTAAAGGATTTTTTAAATAAGGACCCCCAAAGAGAGGCTCGGC
GGGTACAAAATTTTCCTAAAAATTTATTCTGCGGTTTCTCTCCGAGCCG
S H V L K G F L N K D P K E R L G>

1410 1420 1430 1440 1450
TGCCGGCCACAGACTGGATTTTCTGACATCAAGTCCCACGCGTTCTTCCG
ACGGCCCGGTGTCTGACCTAAAAGACTGTAGTTCAGGGTGCGCAAGAAGGC
C R P Q T G F S D I K S H A F F R>

FIGURE 6 (CONT'D)

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1460      1470      1480      1490      1500
CAGCATAGACTGGGACTTGCTGGAGAAGAAGCAGGCGCTCCCTCCATTCC
GTCGTATCTGACCCTGAACGACCTCTTCTTCGTCCGCGAGGGAGGTAAGG
  S  I  D  W  D  L  L  E  K  K  Q  A  L  P  P  F>

1510      1520      1530      1540      1550
AGCCACAGATCACAGACGACTACGGTCTGGACAACTTTGACACACAGTTC
TCGGTGTCTAGTGTCTGCTGATGCCAGACCTGTTGAAACTGTGTGTCAAG
Q  P  Q  I  T  D  D  Y  G  L  D  N  F  D  T  Q  F>

1560      1570      1580      1590      1600
ACCAGCGAGCCCGTGCAGCTGACCCAGACGATGAGGATGCCATAAAGAG
TGGTCGCTCGGGCACGTGCGACTGGGGTCTGCTACTCCTACGGTATTTCTC
  T  S  E  P  V  Q  L  T  P  D  D  E  D  A  I  K  R>

1610      1620      1630      1640      1650
GATCGACCAGTCAGAGTTCGAAGGCTTTGAGTATATCAACCCATTATTGC
CTAGCTGGTCACTCTCAAGCTTCCGAAACTCATATAGTTGGGTAATAACG
  I  D  Q  S  E  F  E  G  F  E  Y  I  N  P  L  L>

1660      1670      1680      1690      1700
TGTCCACCGAGGAGTCGGTGTGAGGCCGCGTTCGTCTCTGTCTGGACAC
ACAGGTGGCTCCTCAGCCACACTCCGGCGCACGCAGAGACAGCACCTGTG
L  S  T  E  E  S  V>
----- C-terminus -->

1710      1720      1730      1740      1750
GCGTGATTGACCCTTTAACTGTATCCTTAACCACCGCATATGCATGCCAG
CGCACTAACTGGGAAATTGACATAGGAATTGGTGCCGTATACGTACGGTC

1760      1770      1780      1790      1800
GCTGGGCACGGCTCCGAGGGCGGCCAGGGACAGACGCTTGCGCCGAGACC
CGACCCGTGCGGAGGCTCCCGCCGGTCCCTGTCTGCGAACGCGGCTCTGG

1810      1820      1830      1840      1850
GCAGAGGGAAGCGTCAGCGGGCGCTGCTGGGAGCAGAACAGTCCCTCACA
CGTCTCCCTTCGCAGTCGCCCGCGACGACCCTCGTCTTGTCAGGGAGTGT

1860      1870      1880      1890      1900
CCTGGCCCCGGCAGGCAGCTTCGTGCTGGAGGAACTTGCTGCTGTGCCTGC
GGACCGGGCCGTCCGTGGAAGCACGACCTCCTTGAACGACGACACGGACG

1910      1920      1930      1940      1950
GTCGCGGCGGATCCGCGGGGACCCTGCCGAGGGGGCTGTCATGCGGTTTC
CAGCGCCGCTAGGCGCCCTGGGACGGCTCCCCCGACAGTACGCCAAAG

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FIGURE 6 (CONT'D)

1960 1970 1980 1990 2000
CAAGGTGCACATTTTCCACGGAAACAGAACTCGATGCACTGACCTGCTCC
GTTCCACGTGTAAAAGGTGCCTTTGTCTTGAGCTACGTGACTGGACGAGG

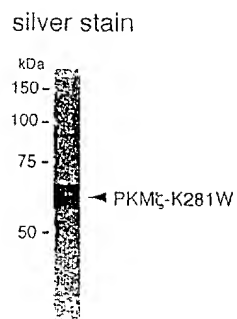
2010 2020 2030 2040 2050
GCCAGGAAAGTGAGCGTGTAGCGTCCTGAGGAATAAAATGTTCCGATGAA
CGGTCCTTTCACCTCGCACATCGCAGGACTCCTTATTTTACAAGGCTACTT

AAAAAAAAA

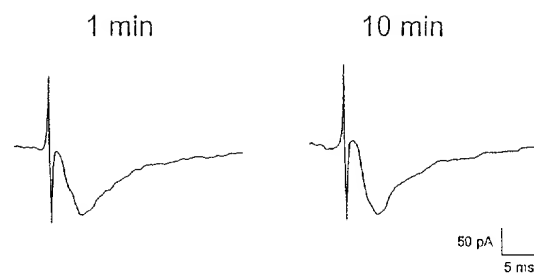
TTTTTTTTT

FIGURE 6 (CONT'D)

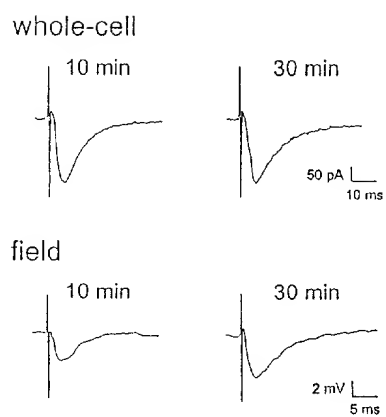
A



B



C



D

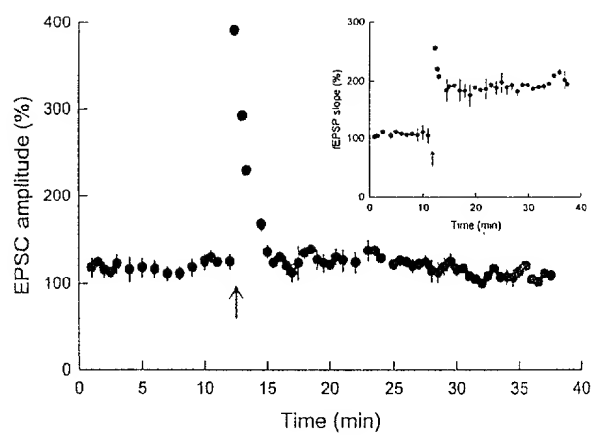


FIGURE 7